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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,156	10/03/2003	Frederick H. Grenning	5320/55488	3953

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EXAMINER

SAVAGE, MATTHEW O

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,156

Applicant(s)

GRENNING, FREDERICK H.

Examiner

Matthew O. Savage

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-3-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structure enabling the reservoir to be removable as recited in claims 3, 4, and 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3, 4, and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to adequately disclose the structure for enabling the reservoir to be removable.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Wiedrich et al.

With respect to claim 1, Wiedrich et al disclose a method of dechlorinating fluid comprising the steps of: flowing fluid through a dechlorination device F (see FIG. 1 and lines 14-30 of col. 9, especially lines 23-24) along a flow path (e.g., the main flow path, see lines 31-45 of col. 9); diverting a proportion of the fluid through a bypass in the dechlorination device; the exposing the proportion to a dechlorination agent in the bypass; and merging the proportion of the fluid back into the fluid flow path.

As to claim 2, Wiedrich et al disclose the step controlling the amount of fluid diverted through the bypass via a valve (see from line 66 of col. 7 to line 2 of col. 8).

Regarding claim 3, Wiedrich et al disclose the dechlorination agent as being contained in a removable reservoir 10 in the bypass.

As to claim 4, Wiedrich et al disclose the removable reservoir as being removable from the dechlorination device without removing the dechlorination device from the fluid flow path (e.g., by removing the reservoir while leaving the other parts of the bypass circuit intact).

With respect to claim 5, Wiedrich et al disclose a device F for dechlorinating fluid, comprising: a flow tube (e.g., the main flow line conduit described on lines 31-45 of col. 9), a bypass in fluid communication with the flow tube (see line 37 of col. 9), wherein the bypass diverts a proportion of the fluid from the flow tube to the bypass, and a dechlorination agent reservoir 10 in the bypass.

As to claim 6, Wiedrich et al disclose a control valve regulating the proportion of the fluid entering said bypass (see from line 66 of col. 7 to line 2 of col. 8).

Concerning claim 7, Wiedrich et al disclose the dechlorination agent reservoir as including an agent mixing chamber 8 (see FIG. 1).

Regarding claim 8, Wiedrich et al disclose the dechlorination agent reservoir as being selectively removable from the dechlorination device without removing the dechlorination device from said fluid path (e.g., by cutting adjacent portions of the bypass circuit adjacent the inlet and outlet of the reservoir while leaving the other parts of the bypass circuit intact).

Concerning claim 9, Wiedrich et al disclose the agent mixing chamber as including a dechlorination agent (see lines 23-26 of col. 9).

As to claim 10, Wiedrich et al disclose the control valve as controlling the amount of the dechlorination agent added to the fluid (see from line 66 of col. 7 to line 19 of col. 9).

With respect to claim 11, Wiedrich et al disclose the by-pass as including an inlet tube and an outlet tube (e.g., defined by the piping mentioned on lines 36-42 of col. 9).

Regarding claim 17, Wiedrich et al disclose a first dechlorinating agent connecting tube 40 and a second dechlorinating agent connecting tube 34, the first dechlorinating agent connecting the inlet tube to the dechlorinating agent reservoir and the second dechlorinating agent connecting tube connects the outlet tube to the dechlorinating agent reservoir.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 13, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedrich et al in view of Heany.

With respect to claims 12 and 13, Wiedrich et al fail to specify the details of the inlet and outlet tubes. Heany disclose an analogous apparatus including an inlet tube e angled toward the direction of fluid flow through a flow tube C and an outlet tube e¹ angled away from the direction of fluid flow through the flow tube (e.g., since it is perpendicular to the direction of flow) and suggests that such an arrangement

encourages flow into and through the reservoir D. It would have been obvious to have modified the apparatus of Wiedrich et al so as to have included the details of the inlet and outlet tubes as suggested by Heany in order to encourage flow into and out of the reservoir.

With respect to claim 19, Wiedrich et al disclose a second connecting tube formed of hard piping mounted to the reservoir (see lines 59-61 of col. 10) but fails to specify the first connecting tube as being formed of hard piping. Heany discloses that is known to form a first and second connecting tubes e, e¹ of hard piping (e.g., since the tubes are made of metal, see the cross hatching in FIG. 2) and suggests that such an arrangement facilitates connection of the reservoir d to the flow tube C in cases where the reservoir and flow tube were in close proximity to each other by enabling the use of gland fittings d, g. It would have been obvious to have modified the apparatus of Wiedrich et al so as to have included first and second dechlorinating agent connecting tubes are made of hard piping mounted to said dechlorinating agent reservoir in order to facilitate connection of the flow tube to the reservoir.

Claims 14, 15, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedrich et al in view of King.

With respect to claim 14, Wiedrich et al fail to specify the inlet tube as including an inlet diverter and an outlet tube as including an outlet converter. King discloses an analogous apparatus having an inlet tube 16 including an inlet diverter 50 and an outlet tube 40 including an outlet converter 54 (see FIG. 2) and suggests that such an

arrangement encourages flow into and through the reservoir 12. It would have been obvious to have modified the apparatus of Wiedrich et al so as to have included the details of the inlet diverter and outlet converter as suggested by King in order to encourage flow into and through the reservoir.

As to claim 15, King discloses the inlet tube 16 and the outlet tube 40 as being positioned on the same side of the flow tube 18 (see FIG. 2).

Regarding claim 16, Wiedrich et al and King fail to specify the inlet and outlet tubes as being on opposite sides of the conduit, however, such a modification is considered an obvious rearrangement of parts in order to accommodate adjacent equipment since such a modification would not modify the operation of the device (see *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)).

As to claim 18, Wiedrich et al include an inlet connecting tube being formed of soft flexible tubing (see lines 52-58 of col. 10) but fails to specify the outlet connecting tube as being formed of soft flexible tubing. King discloses an analogous device including first and second dechlorinating agent connecting tubes 16, 40 made of soft flexible tubing (see line 65 of col. 3 and line 2 of col. 5) and suggests that such an arrangement facilitates connection of the reservoir 12 to the flow tube 18. It would have been obvious to have modified the apparatus of Wiedrich et al so to have included the inlet and outlet tubes formed of soft flexible material in order to facilitate connection of the reservoir to the flow tube.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Savage
Matthew O Savage
Primary Examiner
Art Unit 1724

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March 31, 2005